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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.
09/346,353	07/02/99	ANGELOPOULOS	MF Y0996-049BX

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EXAMINER
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ART UNIT	PAPER NUMBER
1714	

DATE MAILED: 05/04/00

Please find below and/or attached an Office communication concerning this application or proceeding.

Commissioner of Patents and Trademarks

# Office Action Summary

Application No.

09/346,353

Applicant(s)

Angelopoulos et al.

Examiner

T. Yoon

Group Art Unit

1914

—The MAILING DATE of this communication appears on the cover sheet beneath the correspondence address—

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, such period shall, by default, expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).

## Status

☒ Responsive to communication(s) filed on 3-29-00

☐ This action is **FINAL**.

☐ Since this application is in condition for allowance except for formal matters, **prosecution as to the merits is closed** in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

## Disposition of Claims

☒ Claim(s) 1-45 is/are pending in the application.

Of the above claim(s) 17-19, 21, 26-39 and 43-45 is/are withdrawn from consideration.

☐ Claim(s) \_\_\_\_\_ is/are allowed.

☒ Claim(s) 1-16, 20, 22-25 and 40-42 is/are rejected.

☐ Claim(s) \_\_\_\_\_ is/are objected to.

☐ Claim(s) \_\_\_\_\_ are subject to restriction or election requirement.

## Application Papers

☒ See the attached Notice of Draftsperson's Patent Drawing Review, PTO-948.

☐ The proposed drawing correction, filed on \_\_\_\_\_ is ☐ approved ☐ disapproved.

☐ The drawing(s) filed on \_\_\_\_\_ is/are objected to by the Examiner.

☐ The specification is objected to by the Examiner.

☐ The oath or declaration is objected to by the Examiner.

## Priority under 35 U.S.C. § 119 (a)-(d)

☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d).

☐ All ☐ Some\* ☐ None of the CERTIFIED copies of the priority documents have been received.

☐ received in Application No. (Series Code/Serial Number) \_\_\_\_\_

☐ received in this national stage application from the International Bureau (PCT Rule 1.7.2(a)).

\*Certified copies not received: \_\_\_\_\_

## Attachment(s)

☐ Information Disclosure Statement(s), PTO-1449, Paper No(s). \_\_\_\_\_

☐ Interview Summary, PTO-413

☒ Notice of Reference(s) Cited, PTO-892

☐ Notice of Informal Patent Application, PTO-152

☒ Notice of Draftsperson's Patent Drawing Review, PTO-948

☐ Other \_\_\_\_\_

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Applicant's election without traverse of Group I, claims 1-16, 20-26 and 40-42, in Paper No. 6 is acknowledged. However, applicant failed to elect a particular specie, a plasticizer or antiplasticizer, requested in the Office Action. Thus, the examiner will examine claims directed to a plasticizer, claims 1-16, 20, 22-25 and 40-42.

The recited "N1N" in line 5 of the page 11 is objected.

The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

Claims 1-16, 20, 22, 23 and 25 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1 and 2 of U.S. Patent No. 5,969,024. Although the conflicting claims are not identical, they are not patentably distinct from each other because the instantly recited additive (claim 1), second material (claim 7) and plasticizer (claim 12) encompass the siloxane of the patent as evidenced by claim 4, Siloxanes for example.

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The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claims 24 and 40-42 are rejected under 35 U.S.C. 112, first paragraph, as containing subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

There is no teaching or evidence that the addition of an oxidant provides local mobility to said polymer. The addition of said additive and an oxidant in claim 24 will not provide local mobility to said polyaniline monomer which is neither precursors to electrically conductive polymers nor electrically conductive polymers.

Note that if applicant's contention is a method of oxidative polymerization in the presence of an additive and/or oxidant, these claims will be restricted out and will not be examined since these claims (invention) are distinct and independent from the claim 1 for example.

Claims 5, 9 and 15 are rejected under 35 U.S.C. 112, first paragraph, as containing subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

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The recited "substituted" and "substituents" in claims 5, 9 and 15 are rejected under 35 U.S.C. 112, first paragraph, since claims are not commensurate in scope with enabling disclosure until the named groups for said "substituted" and "substituents" as described in the specification are recited in the claims for "substituted" and "substituents". It is immaterial that the same terminology is allowed in other patents.

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 4, 10 and 24 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

The recited "said plasticizer" in claim 10 lacks an antecedent basis. The claim 24 improperly broadens the scope of the claim 1 by omitting a solvent and by reciting polyaniline monomer which is neither precursors to electrically conductive polymers nor electrically conductive polymers. The period (.) is missing at the end of the claims 4 and 10.

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --

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(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claim 11 is rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Han (US 5,171,478), Ikkala et al (US 5,520,852) or Cao et al (US 5,232,631).

The process recited in Han, Ikkala and Cao inherently yields the recited at least one crystal grain and material having isotropic electrical conductivity.

Thus, applicant's invention lacks a novelty.

Claims 1-16, 20, 22, 23 and 25 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Han (US 5,171,478).

Han teaches a method of plasticizing polyaniline by employing a plasticizer at col. 6, line 21 to col. 7, line 66 and in example 6. The removal of solvent is taught at col. 22, line 57 to col. 23, line 6 also. The recited plasticizers of Han would not substantially dissolve polyanilines in the absence of a solvent, and would provide local mobility to polyanilines. The recited plasticizers of

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Han would not substantially dissolve in polyanilines either. Stretching of a film is the art known. Crystalline state is an inherent property in Han since the same materials and process (mixing polyaniline solution with an additive, and then removing a solvent) are used in Han and the instant invention. Thus, applicant's invention lacks a novelty.

Claims 1-16, 20, 22, 23 and 25 are rejected under 35 U.S.C. 103(a) as obvious over Han (US 5,171,478) in view of Cao et al (US 5,232,631).

The claim 6 recites a stretch oriented film over Han. However, stretch orienting of a film is a routine practice in the art as taught by Cao, col. 5, lines 61-62.

It would have been obvious to one of ordinary skill in the art at the time of the instant invention to stretch orienting the film of Han by teaching of Cao since films are known to subject to a stretch orientation in order to improve physical properties.

Claims 1-16, 20, 22, 23 and 25 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Cao et al (US 5,232,631).

Cao teaches a method of plasticizing polyaniline by employing a plasticizer, surfactant, at col. 14, line 44 to col. 15, line 50 and in examples. The recited plasticizers of Cao would not substantially dissolve polyanilines in the absence of a solvent, and would provide local mobility to polyanilines. The recited plasticizers of Cao would not substantially dissolve in polyanilines either. Stretching of a film is the art known. Crystalline state is an inherent property in Cao since

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the same materials and process (mixing polyaniline solution with an additive, and then removing a solvent) are used in Cao and the instant invention. Thus, applicant's invention lacks a novelty.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tae H. Yoon whose telephone number is (703) 308-2389. The examiner can normally be reached on Mon-Thr from 8:00 to 5:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Vasu Jagannathan, can be reached on (703) 306-2777. The fax phone number for this Group is (703) 305-5433.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group receptionist whose telephone number is (703) 308-0661.

THY/May 2, 2000



TAE YOON  
PRIMARY EXAMINER